

HAZARDOUS WASTE PERMIT

Permit Number SC3 210 020 449

Issue Date: June 1, 1998
Expiration Date: July 1, 2008

Effective Date: July 1, 1998
Effective Date of Last Modified:

This Permit is hereby issued to:

Owner/Operator: U.S Army Garrison, Fort Jackson
(USATC and Fort Jackson)

Facility Contact: Barbara Williams

Address: Fort Jackson, South Carolina 29207

Phone: (803) 751-6858

This Permit is for storage of hazardous waste in one hazardous waste container storage building and identification and corrective action for solid waste management units (SWMUs) located at the USATC and Fort Jackson.

This Permit is issued pursuant to Section 44-56-10 et seq. Regulation 61-79 of the 1976 South Carolina Code of Laws, as amended. The authority granted hereunder is subject to the requirements of the aforementioned laws and regulations and the attached conditions.

Richard Haynes, P.E., Director
Division of Waste Management
Bureau of Land and Waste Management

This Permit is the property of the Bureau of Land and Waste Management and must be surrendered on demand. This signature page must be posted at all times in a conspicuous place on the premises.

TABLE OF PERMIT MODIFICATIONS

**U.S. Army Garrison, Fort Jackson
(USATC and Fort Jackson)
SC3 210 020 449
Richland County**

Effective Date	Class	Location	Description of Change
May 19, 2006	III	Cover Page	Division Contact Changed
May 19, 2006	III	IV.A.1.	Changed "are undergoing closure" to "were clean closed" on line 3
May 19, 2006	III	IV.A.2	Deleted "at this time"
May 19, 2006	III	IV.A.5	Appendix A-6 added
May 19, 2006	III	IV.A.6	Addition of Appendix A-7
May 19, 2006	III	IV.A.7	IV.A.5 became IV.A.7
May 19, 2006	III	IV.A.8	IV.A.6 became IV.A.8
May 19, 2006	III	IV.A.8	Removed sentence "Conditions beyond the facility boundary, if applicable." on line 1
May 19, 2006	III	IV.B	Title change to "Notification and Assessment requirements for newly identified SWMUs or AOCs"
May 19, 2006	III	IV.B.1	Title of section changed from "Department Notification of Newly Identified SWMU or AOC" to "Notification"
May 19, 2006	III	IV.B.1	Added "in writing, within fifteen (15) calendar days of discovery" on line 1 & 2
May 19, 2006	III	IV.B.1	Added "potentially" additional on line 2
May 19, 2006	III	IV.B.1	Added "AOCs and/or SWMUs" on line 2
May 19, 2006	III	IV.B.1	IV.A.5 was changed to IV.A.7 to reflect correct permit condition on line 3
May 19, 2006	III	IV.B.1	Added "potential" SWMU or AOC on line 4
May 19, 2006	III	IV.B.1	Change "release" to "suspected release" on line 5
May 19, 2006	III	IV.B.2.	Title of section changed from "SAR Submittal" to "Assessment Report"
May 19, 2006	III	IV.B.2.	Changed "ninety days" to "ninety calendar days" on lines 1 & 2
May 19, 2006	III	IV.B.2.	Changed "include" to "provide the following information" on line 4
May 19, 2006	III	IV.B.2	Added "and determination that the potential site is an AOC or SWMU" on lines 2 & 3
May 19, 2006	III	IV.B.2	SWMU Assessment Report (SAR) was changed to Assessment Report (AR) on line 3
May 19, 2006	III	IV.B.2	SAR was changed to AR due to change above on line 4
May 19, 2006	III	IV.B.2.1.	Added "such" as required
May 19, 2006	III	IV.B.2.4	Added "(were)"
May 19, 2006	III	IV.B.2.5	Added "contained" in the wastes on line 2
May 19, 2006	III	IV.B.3.	Changed title of section to "Department Determination"
May 19, 2006	III	IV.B.3	SAR was changed to AR twice on lines 1 & 2

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May 19, 2006	III	IV.B.3	Added "at" the SWMUs or AOCs on line 2
May 19, 2006	III	IV.B.3	Deleted "discovered" in the AR on line 2
May 19, 2006	III	IV.B.3	"and/or" is put in place of "or" on line 4
May 19, 2006	III	IV.B.3	Changed cited condition to IV.E.1.a on line 4
May 19, 2006	III	IV.C.1.	Added "at previously identified SWMUs or AOCs" on lines 2 & 3
May 19, 2006	III	IV.C.1	Added "Permit" Condition on line 5
May 19, 2006	III	IV.C.2.	Added "IV.D. or" on line 3
May 19, 2006	III	IV.D.1.	Added "or AOC" on line 3
May 19, 2006	III	IV.D.1	Moved "a Confirmatory Sampling (CS) Work plan" within sentence on line 5
May 19, 2006	III	IV.D.1.	Added "IV.A.4, or as required by Permit Condition IV.B.3. or IV.C.2." on lines 4 & 5
May 19, 2006	III	IV.D.2	Deleted shall "either" on line 4
May 19, 2006	III	IV.D.4.	Added "Permit Condition IV.A.4, or as required by Permit Condition IV.B.3, or IV.C.2" on lines 3 & 4
May 19, 2006	III	IV.D.5.	Added "IV.E." in place of "IV.E.1.b" on line 4
May 19, 2006	III	IV.D.5.	Added "shall" in place of "will" on line 5
May 19, 2006	III	IV.E.1.	Removed "Condition IV.A.4" Added "Conditions IV.B.3, IV.C.2 or IV.D.5." and "IV.E.2." on lines 3 & 4
May 19, 2006	III	IV.E.1	IV.E.1.a and IV.E.1.b from original permit was combined to become IV.E.1
May 19, 2006	III	IV.E.1	Changed condition from a IV.E.1.(c) to IV.E.2 and titled "Required Contents"
May 19, 2006	III	IV.E.2	Added title "Required Contents"
May 19, 2006	III	IV.E.2.	Added "releases" on line 3
May 19, 2006	III	IV.E.2	Added "(RFI Work Plan Outline)" on lines 1 & 2
May 19, 2006	III	IV.E.2	Changed "and" to "and/or" on line 5
May 19, 2006	III	IV.E.2	Removed wording "or has already been characterized" on line 6
May 19, 2006	III	IV.E.2	Changed wording to "any" on line 10
May 19, 2006	III	IV.E.3	Changed this condition from IV.E.1(d) to IV.E.3 and titled "Department Approval"
May 19, 2006	III	IV.E.4	Changed this condition from IV.E.2 to IV.E.4
May 19, 2006	III	IV.E.5	Changed this condition from IV.E.3(a) to IV.E.5 and titled "RFI Progress Reports"
May 19, 2006	III	IV.E.5	Deleted number IV.E.3.a and included under IV.E.5
May 19, 2006	III	IV.E.5	Added word "calendar" days twice on lines 2 & 3
May 19, 2006	III	IV.E.5.a-i	Changed numbering from i-ix to a-i, due to reformatting
May 19, 2006	III	IV.E.5.c	Changed "all" to "any"
May 19, 2006	III	IV.E.5.e	Added "significant" contacts
May 19, 2006	III	IV.E.5.i	Deleted inspection "reports"
May 19, 2006	III	IV.E.6	Changed this condition from IV.E.3.b to IV.E.6 and titled "RFI Reports"
May 19, 2006	III	IV.E.6	Used acronym "RFI" instead of writing out on line 1
May 19, 2006	III	IV.E.6	Added "Permit" condition on line 2

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May 19, 2006	III	IV.E.6	Changed "A" to "Any" revised and removed "Final" RFI on line 4
May 19, 2006	III	IV.E.6	Added "calendar" days on line 5
May 19, 2006	III	IV.E.6	Removed "on the RFI Report" on line 6
May 19, 2006	III	IV.E.6	Added "required in the RFI Work Plan" on line 7
May 19, 2006	III	IV.E.6	Changed "IV.E.1.d" to "IV.E.3" due to renumbering on line 15
May 19, 2006	III	IV.E.7	Changed this condition from IV.E.3.c to IV.E.7 and titled "Department Notification"
May 19, 2006	III	IV.F.1(a)	Added interim measures wording on lines 2-4
May 19, 2006	III	IV.F.1(a)	Removed "such" notification on line 8
May 19, 2006	III	IV.F.1(a)	Added "Condition" on line 9
May 19, 2006	III	IV.F.1(a)	Removed sentence "The Permittee may initiate IM by submitting an IM Work Plan for approval and reporting in accordance with the requirements under Condition IV.F." on line 11
May 19, 2006	III	IV.F.1.b	Changed "is" to "are" on line 3
May 19, 2006	III	IV.F.3(a)	Added "the approved Work Plan" in place of "Appendix C" on line 3
May 19, 2006	III	IV.F.3.ii	Added an item to the list: "summaries of findings"
May 19, 2006	III	IV.F.3.iii-vi	Numbering changed due to added list item
May 19, 2006	III	IV.F.3.iv	Removed "potential" problems
May 19, 2006	III	IV.G.1(a)	Changed condition to "IV.G.1(b)" on line 4 Added final sentence "The CMS may be performed concurrent with the RFI if the Department determines that sufficient investigative details are available to allow concurrent action."
May 19, 2006	III	IV.G.1(b)	Added "written" on line 4 and regulation code "264.553" on line 11
May 19, 2006	III	IV.G.1.b	Changed A.6 to A.8 because of renumbering in the permit
May 19, 2006	III	IV.G.1.b	Added "(CMS Outline)" on line 2
May 19, 2006	III	IV.G.1.b	Changed "and/or" to "and" on line 4
May 19, 2006	III	IV.G.1.b	Added "(Schedule of Compliance)" on line 8
May 19, 2006	III	IV.G.1.b	Deleted "3005(c)(3)" on line 10
May 19, 2006	III	IV.G.1.c	Removed "This modified CMS Work Plan becomes the approved CMS Work Plan." On line 6
May 19, 2006	III	IV.G.2	Removed "begin to" on line 1
May 19, 2006	III	IV.G.2	Added "or" no later than on line 2
May 19, 2006	III	IV.G.3.a	Removed "on the CMS Report" on line 5
May 19, 2006	III	IV.G.3.b	Removed "Final" Report on line 5
May 19, 2006	III	IV.H.1	Added "including current and reasonably anticipated future land uses" on line 3
May 19, 2006	III	IV.H.2.	Added section titled "Statement of Basis"
May 19, 2006	III	IV.H.3	Added section "Permit Modification"
May 19, 2006	III	IV.I.1	Added title to section "CMI Work Plan"
May 19, 2006	III	IV.I.1	Added "or AOCs" on line 4
May 19, 2006	III	IV.I.1	"This" changed to "a CMI" on line 5
May 19, 2006	III	IV.I.1	Deleted "components" on line 5

TABLE OF PERMIT MODIFICATIONS

May 19, 2006	III	IV.I.1.(a)	Added "A description of the conceptual design, technical features (e.g. Plans and Specifications and a Construction Plan for the selected remedy (ies) to achieve media cleanup standards protective of human health and the environment" on lines 2-4
May 19, 2006	III	IV.I.1.(b)	Added "remedial" residue on line 4
May 19, 2006	III	IV.I.1.(f) and IV.I.1.f.i-xi	Added Land Use Control Language
May 19, 2006	III	IV.I.2	Added title to section "Department Approval"
May 19, 2006	III	IV.J.3.	Added language to discuss the submittal of the CMI report including certification of the corrective measures activities
May 19, 2006	III	IV.K.	Changed title from "Progress Reports" to "Progress Reports and Changes"
May 19, 2006	III	IV.K.1	<p>Titled section "Semiannual CMI Progress Report"</p> <p>Added "until the Corrective Measure Implementation Report is approved by the Department, or with Department Approval, when LUCs are the only remaining part of CMI." in place of "until the Department determines that the remedy is complete."</p> <p>On lines 5-7</p> <p>Changed numbering system from 1-9 to a-i</p>
May 19, 2006	III	IV.K.1	Added "Implementation" on line 3
May 19, 2006	III	IV.K.1	Added "CMI" on line 8
May 19, 2006	III	IV.K.1.a	Added "Work Plan"
May 19, 2006	III	IV.K.1(d)	Added "and Federal" Government on line 2
May 19, 2006	III	IV.K.2.	Addition of section "Annual LUCs Status Reports"
May 19, 2006	III	IV.K.3.	Addition of section "Funding"
May 19, 2006	III	IV.K.4	Addition of section "Significant Change in Land Use"
May 19, 2006	III	IV.K.5	Addition of section "Request for Modification for Significant Land Use Change"
May 19, 2006	III	IV.K.6	Addition of section "Property Conveyances"
May 19, 2006	III	IV.M.1	Added "reports" and schedules in two places on lines 1 & 2
May 19, 2006	III	IV.M.3	Changed permit condition from IV.C to IV.D (typo in old permit) on line 2
May 19, 2006	III	IV.M.3	Changed "SAR" to "AR" on line 1
May 19, 2006	III	IV.M.3	Added "Permit" Condition on lines 2 & 3
May 19, 2006	III	IV.M.5	Division Contact Changed
May 19, 2006	III	IV.M.5	Deleted "Hazardous & Infectious" because of change of Division name on line 5
May 19, 2006	III	Appendix A, Appendix A-1	Removal of SWMUs 1,3,6,10,20,21,30,AOC B Addition of SWMU 39
May 19, 2006	III	Appendix A, Appendix A-2	Addition of SWMUs 11,20,29,30,33,34,38,40,51, and AOC C
May 19, 2006	III	Appendix A, Appendix A-2	Building numbers for SWMU 34 and 36 changed to Bldgs 2182 and 1701 respectively. Due to an error in the original permit
May 19, 2006	III	Appendix A, Appendix A-4	Removal of SWMUs 5,7,8,9,11,29,33,34,38,39,40, and AOC C Addition of SWMU 52 and AOCs D,E,F,G,H,I,J,K,L,M,N,O,P,Q

May 19, 2006	III	Appendix A, Appendix A-5	Addition of SWMUs 7,8,9,10
May 19, 2006	III	Appendix A, Appendix A-5	Table title change from undergoing clean closure to clean closed under RCRA.
May 19, 2006	III	Appendix A, Appendix A-6	Addition of Appendix A-6 (Land Use Controls) Includes SWMU 5
May 19, 2006	III	Appendix A, Appendix A-7	Addition of Appendix A-7 (Corrective Measure Study) Includes SWMUs 1,3,6,21,49,50,AOC B
	III	Title Page	Facility name changed to "U.S. Army Garrison, Fort Jackson", the former name "USATC and Fort Jackson" was retained to help maintain the accuracy of the administrative record.
	III	Cover Page	Owner/Operator Name Changed
	III	Cover Page	Division Contact Changed
	III	Cover Page	Facility Contact Changed
	III	Cover Page	Facility Contact Phone Changed
	III	Appendix A, Appendix A-1	Removal of SWMUs 2, 14, 39, 47, 48
	III	Appendix A, Appendix A-2	Addition of SWMUs 39, 52, and AOC B
	III	Appendix A, Appendix A-4	Removal of SMWU 52 and Addition of AOC R
	III	Appendix A, Appendix A-6	Addition of SWMUs 1, 2, 3, 6, 14, 21, 47, 48, and 50
	III	Appendix A, Appendix A-7	Removal of SWMUs 1, 3, 6, 21, 50 and AOC B

APPENDIX A

SOLID WASTE MANAGEMENT UNITS
(SWMUS)

SUMMARY

APPENDIX A - SOLID WASTE MANAGEMENT UNIT AND AREA OF CONCERN SUMMARY

U.S. Army Garrison, Fort Jackson
SC3 210 020 449
Richland County

Solid Waste Management Units and Area of Concern Numbers and descriptions correspond with those noted in the RCRA Facility Assessment (RFA) Report.

Appendix A-1 List of Solid Waste Management Units and Areas of Concern requiring an RFI.	
SWMU/AOC No/Letter	SWMU/AOC Name
SWMU 12	Wonson OB/OD Ground
SWMU 17	Inchon OB/OD Ground
SWMU 23	Remagen Impact Range
SWMU 44	WETSITE Septic Tank

Appendix A-2 List of Solid Waste Management Units and Areas of Concern that require no further action at this time.	
SWMU/AOC No/Letter	SWMU/AOC Name
SWMU 4	WETSITE Landfill
SWMU 11	Waste Oil Tanks
SWMU 15	Veterinary Incinerator
SWMU 16	Former Sewage Treatment Plant
SWMU 18	Waste Solvent Cabinet
SWMU 19	TASC HW SAA
SWMU 20	PCB Storage Area
SWMU 22	Hospital Waste SAA
SWMU 24	Old Rocket Grenade Range
SWMU 27	Battery Storage Area
SWMU 28	Pesticide Storage Area
SWMU 29	Energy Plant Drainage Area
SWMU 30	Former Varsol UST
SWMU 31	Storm Sewer System
SWMU 32	Sanitary Sewer System
SWMU 33	Bldg 1611 Wash Pad & O/W Separator
SWMU 34	Bldg 2182 Wash Pad & O/W Separator
SWMU 35	Bldg 2075 Wash Pad & O/W Separator
SWMU 36	Bldg 1701 Wash Pad & O/W Separator
SWMU 37	Bldg 2525 Wash Pad & O/W Separator
SWMU 38	Bldg 9428 Wash Pad & O/W Separator

APPENDIX A - SOLID WASTE MANAGEMENT UNIT AND AREA OF CONCERN SUMMARY

Module I. <u>SW MU 39</u>	Module II. <u>Marine WETSITE Wash Pad</u>
SWMU 40	NG Wash Pad & O/W Separator
SWMU 41	Vehicle Training Waste Oil Tank
SWMU 42	NG SAA
SWMU 43	Inactive NG Acid Neutralization Area
SWMU 45	Portable Waste Oil Tanks
SWMU 46	Dumpsters
SWMU 47	Former Roads & Grounds Storage Area
SWMU 51	Indoor Firing Range
Module III. <u>SW MU 52</u>	Module IV. <u>Former Tanks Repair Shop</u>
AOC A	Former Tank 5453
AOC B	Tank 1619
AOC C	Shed 1617 Area

Appendix A-3 List of Solid Waste Management Units which are also units under the operating portion of this permit.	
SWMU/AOC No/Letter	SWMU/AOC Name
SWMU 25	DRMO HW Loading/Unloading Pad
SWMU 26	DRMO HW Storage Facility

Appendix A-4 List of Solid Waste Management Units and Areas of Concern requiring Confirmatory Sampling.	
SWMU/AOC No/Letter	SWMU/AOC Name
AOC D	Camp Jackson Ranges
AOC E	Small Arms Ranges East of Chestnut Road
AOC F	Live Hand Grenade Court 2
AOC G	FTJA Flight Club (FJFC) Salerno Ranges
AOC H	FJFC Saint Lo Range
AOC I	Mortar Ranges 5a, 7, and 8 Safety Fans
AOC J	Submachine Gun Area
AOC K	Soils Evaluation Adjacent to SWMU 21
AOC L	Bldg 2603 Paint Spray Booth SAA
AOC M	Bldg 4500 Moncreif Hospital Pathology Lab SAA
AOC N	Bldg 4500 Moncreif Hospital Chemotherapy Lab SAA
AOC O	Storage Bldg 2611 at DLE CSA
AOC P	Bldg 4500 Moncreif Hospital Storage Room in Basement CSA
AOC Q	MW 6-10
AOC R	Bldg 2607 Carwash O/W Sep

APPENDIX A - SOLID WASTE MANAGEMENT UNIT AND AREA OF CONCERN SUMMARY

Appendix A-5 List of Solid Waste Management Units and Areas of Concern clean closed under RCRA.	
SWMU/AOC No/Letter	SWMU/AOC Name
SWMU 7	Former HW Storage Bldg 2640
SWMU 8	Former HW Storage Bldg 2641
SWMU 9	Former HW Storage Bldg 2642
SWMU 10	Former HW Storage Bldg 2668
SWMU 13	Inactive 48 th EOD OB/OD Ground

Appendix A-6 List of Solid Waste Management Units and Areas of Concern requiring Land Use Controls				
SWMU/AOC No/Letter	SWMU/AOC Name	Description of Corrective Action	Description of LUC	Corrective Action Document Selecting LUC
SWMU 1	Active Sanitary Landfill	<ul style="list-style-type: none"> - Dermal Cover - Land Use Controls (LUCs) - Monitoring Ground Water Methane LUCs 	<ul style="list-style-type: none"> - no excavation or breaching of dermal cover - no unauthorized (activities not consistent with LUCs) site access - no withdrawal of groundwater - no residential use or residential development of the property 	CMS (9/30/08)
SWMU 2	Inactive Sanitary Landfill-1	<ul style="list-style-type: none"> - Dermal cover - Land Use Controls (LUCs) - Monitoring Groundwater 	<ul style="list-style-type: none"> - no excavation or breaching of dermal cover - no unauthorized (activities not consistent with LUCs) site access - no withdrawal of groundwater - no residential use or residential development of the property 	CMS (4/4/08)
SWMU 3	Inactive Sanitary Lanfill-2	<ul style="list-style-type: none"> - Dermal Cover - Surficial Metal Removal - Land Use Controls (LUCs) - Monitoring 	<ul style="list-style-type: none"> - no excavation or breaching of dermal cover - no unauthorized (activities not consistent with 	CMS (9/30/08)

APPENDIX A - SOLID WASTE MANAGEMENT UNIT AND AREA OF CONCERN SUMMARY

		Ground Water LUCs	LUCs) site access - no withdrawal of groundwater - no residential use or residential development of the property	
SWMU 5	Inactive WETSITE Landfill	-Dermal Cover -GW monitoring (annual for 3 years)	-no excavation or breaching of the cover - no withdrawal of ground water - no residential use or residential development of the property	CMS (11/01/04)
SWMU 6	Tank Hill Landfill	- Dermal cover - Land Use Controls (LUC) - Monitoring	- no excavation or breaching of dermal cover - no unauthorized (activities not consistent with LUCs) site access - no withdrawal of groundwater - no residential use or residential development of the property	CMS (7/23/07)
SWMU 14	Weapons Cleaning Area	- Enhanced Reductive Dechlorination (ERD) - Land Use Controls (LUCs) - Monitoring Ground Water Surface Water LUCs	- no unauthorized (activities not consistent with LUCs) site access - no withdrawal of groundwater - no residential use or residential development of the property	CMS (9/30/08)
SWMU 21	Construction Debris Landfill ó Range 17	- Dermal cover - Land Use Controls (LUC) - Monitoring	- no excavation or breaching of dermal cover - no unauthorized (activities not consistent with LUCs) site access	CMS (7/23/07)

APPENDIX A - SOLID WASTE MANAGEMENT UNIT AND AREA OF CONCERN SUMMARY

			<ul style="list-style-type: none"> - no withdrawal of groundwater - no residential use or residential development of the property 	
SWMU 48	Inactive Bldg 6586 Acid Pit	<ul style="list-style-type: none"> - Soil / Surface Area Excavation - Surficial Cover - Land Use Controls (LUCs) - Monitoring Groundwater LUCs 	<ul style="list-style-type: none"> - no unauthorized (activities not consistent with LUCs) site access - no withdrawal of groundwater - no residential use or residential development of the property 	CMS (9/30/08)
SWMU 50	Former National Guard C&D Landfill	<ul style="list-style-type: none"> - Dermal cover - Surface Debris Removal - Land Use Controls (LUC) - Monitoring 	<ul style="list-style-type: none"> no excavation or breaching of dermal cover - no unauthorized (activities not consistent with LUCs) site access - no withdrawal of groundwater - no residential use or residential development of the property 	CMS (1/26/09)

Appendix A-7 List of Solid Waste Management Units and Areas of Concern requiring a Corrective Measure Study.	
SWMU/AOC No/Letter	SWMU/AOC Name
SWMU 49	Former Weapons Pool Solvent Tank